BBA

Biomembranes

Vol. 1064, 1991

# Cumulative Contents

## *Regular Papers*

The one-site model of human erythrocyte glucose transport: testing its predictions using network thermodynamic computer simulations
*J.M. May (U.S.A.)* 1

Spin labeling studies of wheat germ calmodulin in solution
*M.A. Yacko, T.C. Vanaman and D.A. Butterfield (U.S.A.)* 7

Ionic channels induced by surfactin in planar lipid bilayer membranes
*J.D. Sheppard, C. Jumarie, D.G. Cooper and R. Laprade (Canada)* 13

Pyrene derivatives as markers of transbilayer effect of lipid peroxidation on neuronal membranes
*P. Viani, G. Cervato and B. Cestaro (Italy)* 24

Oligomycin interaction with Na,K-ATPase: oligomycin binding and dissociation are slow processes
*M. Esmann (Denmark)* 31

3-*O*-Methyl-D-glucose transport in rat red cells: effects of heavy water
*R.J. Naftalin and R.J. Rist (U.K.)* 37

Influence of the 53 kDa glycoprotein on the cooperativity of the $Ca^{2+}$-ATPase of the sarcoplasmic reticulum
*H. Kutchai, K. Boyd, Q. Xu and C.P. Weis (U.S.A.)* 49

Antibodies against the 53 kDa glycoprotein inhibit the rotational dynamics of both the 53 kDa glycoprotein and the $Ca^{2+}$-ATPase in the sarcoplasmic reticulum membrane
*J.E. Mahaney, C.P. Weis, C.M. Grisham and H. Kutchai (U.S.A.)* 55

Surface ripples cause the large fluid spaces between gel phase bilayers containing small amounts of cholesterol
*S.A. Simon and T.J. McIntosh (U.S.A.)* 69

Potassium channels in aortic microsomes: conductance, selectivity, barium-induced blockage and subconductance states
*I.B. Bezprozvanny, D.S. Benevolensky and A.P. Naumov (U.S.S.R.)* 75

pH-dependence of inhibition by $H_2$DIDS of mouse erythroid band 3-mediated $Cl^-$ transport in *Xenopus* oocytes. The effect of oligonucleotide-directed replacement of Lys-558 by an Asn residue
*D. Kietz, D. Bartel, S. Lepke and H. Passow (F.R.G.)* 81

Functional characterisation of the ryanodine receptor purified from sheep cardiac muscle sarcoplasmic reticulum
*A.R.G. Lindsay and A.J. Williams (U.K.)* 89

Monensin-mediated antiport of $Na^+$ and $H^+$ across liposome membrane
*K. Nakazato and Y. Hatano (Japan)* 103

A mathematical model of rabbit cortical thick ascending limb of the Henle's loop
*P.L. Fernandes and H.G. Ferreira (Portugal)* 111

Effect of 2.45 GHz microwave radiation on permeability of unilamellar liposomes to 5(6)-carboxyfluorescein. Evidence of non-thermal leakage
*E. Saalman, B. Nordén, L. Arvidsson, Y. Hamnerius, P. Höjevik, K.E. Connell and T. Kurucsev (Sweden, Australia)* 124

Some properties of the H-ATPase activity present in root plasmalemma of *Avena sativa* L. Two different enzymes or one enzyme with two ATP sites?
*G. Roberts, G. Berberián and L. Beaugé (Argentina)* 131

Chemical crosslinking and enzyme kinetics provide no evidence for a regulatory role for the 53 kDa glycoprotein of sarcoplasmic reticulum in calcium transport
*A.J. Burgess, I. Matthews, E.A. Grimes, A.M. Mata, F.M. Munkonge, A.G. Lee and J.M. East (U.K.)* 139

Effect of insulin on the lytic action of lysophosphatidylcholine in lipid bilayers
*G.A. Senisterra, J.J. Gagliardino and E.A. Disalvo (Argentina)* 148

Osmotic lysis of chromaffin granules treated with the ionophores nigericin and A23187 in isotonic sucrose solution at low pH
*J. Engel and E. Donath (F.R.G.)* 155

## *Reports*

Mycoplasma contamination greatly enhances the apparent transport and concentrative accumulation of formycin B by mammalian cell culture
*P.G.W. Plagemann (U.S.A.)* 162

A kinetic method for measuring functional delivery of amphotericin B by drug delivery systems
*R.P. Peterson, S.K. Benz, B.S. Whyte and S.C. Hartsel (U.S.A.)* 165

## *Regular Papers*

Effects of dihydropyridines and inorganic calcium blockers on aggregation and on intracellular free calcium in platelets
*J. Palés, L. Palacios-Araus, A. López and A. Gual (Spain)* 169

Abnormal rapid $Ca^{2+}$ release from sarcoplasmic reticulum of malignant hyperthermia susceptible pigs
*L. Carrier, M. Villaz and Y. Dupont (France)* 175

Oxalate binding to rat intestinal brush-border membrane in pyridoxine deficiency: a kinetic study
*H.K. Koul, S.K. Thind and R. Nath (India)* 184

Renal transport of taurine in luminal membrane vesicles from rabbit proximal tubule
*H. Jessen and M.I. Sheikh (Denmark)* 189

The electrical response of maize to auxins
*H. Felle, W. Peters and K. Palme (Germany)* 199

Characterization and localization of ouabain-insensitive Na-dependent ATPase activities along the rat nephron
*G. El Mernissi, C. Barlet-Bas, C. Khadouri, S. Marsy, L. Cheval and A. Doucet (Morocco, France)* 205

Subconductance states in calcium-activated potassium channels from canine airway smooth muscle
*L.L. Stockbridge, A.S. French and S.F.P. Man (Canada)* 212

Binding and mobility of anti-dinitrophenyl monoclonal antibodies on fluid-like, Langmuir-Blodgett phospholipid monolayers containing dinitrophenyl-conjugated phospholipids
*M.M. Timbs, C.L. Poglitsch, M.L. Pisarchick, M.T. Sumner and N.L. Thompson (U.S.A.)* 219

Some characteristics of sodium-independent phosphate transport across renal basolateral membranes
*A.M. Azzarolo, G. Ritchie and G.A. Quamme (Canada)* 229

Fast translocation of phosphatidylcholine to the outer membrane leaflet after its synthesis at the inner membrane surface in human erythrocytes
*C. Andrick, K. Bröring, B. Deuticke and C.W.M. Haest (F.R.G.)* 235

Phospholipase D activity in subcellular membranes of rat ventricular myocardium
*V. Panagia, C. Ou, Y. Taira, J. Dai and N.S. Dhalla (Canada)* 242

Volumetric properties of polyols (ethylene glycol, glycerol, *meso*-erythritol, xylitol and mannitol) in relation to their membrane permeability: group additivity and estimation of the maximum radius of their molecules
*K. Kiyosawa (Japan)* 251

Formation of ion channels in planar lipid bilayer membranes by synthetic basic peptides
*K. Anzai, M. Hamasuna, H. Kadono, S. Lee, H. Aoyagi and Y. Kirino (Japan)* 256

Solution effects on the thermotropic phase transition of unilamellar liposomes
*L.M. Crowe and J.H. Crowe (U.S.A.)* 267

Cholesterol-transfer protein located in the intestinal brush-border membrane. Partial purification and characterization
*H. Thurnhofer, J. Schnabel, M. Betz, G. Lipka, C. Pidgeon and H. Hauser (Switzerland, U.S.A.)* 275

Sulfate transport in human placenta: further evidence for a sodium-independent mechanism
*D.E.C. Cole and N. Rastogi (Canada)* 287

Antiidiotypic antibodies against anti-cGMP polyclonal antibodies
*E.A. Filatova, G.B. Krapivinsky, G.N. Filatov, A.V. Lazareva and E.E. Fesenko (U.S.S.R.)* 293

Palmitate binding to and efflux kinetics from human erythrocyte ghost
*I.N. Bojesen and E. Bojesen (Denmark)* 297

Oxidative damage by phenylhydrazine diminishes erythrocyte anion transport
*H.R. Petty, M.-j. Zhou and Z. Zheng (U.S.A.)* 308

Water permeation in Madin-Darby canine kidney cells is modulated by membrane fluidity
*M.-C. Giocondi and C. Le Grimellec (France)* 315

Covalent and non-covalent inhibitors of the phosphate transporter of sarcoplasmic reticulum
*H.I. Stefanova, J.M. East and A.G. Lee (U.K.)* 321

Effects of $Mg^{2+}$ and ATP on the phosphate transporter of sarcoplasmic reticulum
*H.I. Stefanova, S.D. Jane, J.M. East and A.G. Lee (U.K.)* 329

Reconstitution experiments provide no evidence for a role for the 53-kDa glycoprotein in coupling $Ca^{2+}$ transport to ATP hydrolysis by the ($Ca^{2+}$-$Mg^{2+}$)-ATPase in sarcoplasmic reticulum
*E.A. Grimes, A.J. Burgess, J.M. East and A.G. Lee (U.K.)* 335

Rapid cold-induced changes of membrane order and $\Delta^9$-desaturase activity in endoplasmic reticulum of carp liver: a time-course study of thermal acclimation
*E. Wodtke and A.R. Cossins (F.R.G., U.K.)* 343

Specific binding of tritium-labeled inositol 1,4,5-trisphosphate to human platelet membranes: ionic and GTP regulation
*S.-B. Hwang (U.S.A.)* 351

Biosynthesis of the cloned intestinal $Na^+$/glucose cotransporter
*M.A. Hediger, J. Mendlein, H.-S. Lee and E.M. Wright (U.S.A.)* 360

## *Report*

Synthetic analogues of alamethicin: effect of C-terminal residue substitutions and chain length on the ion channel lifetimes
*G. Molle, H. Duclohier, S. Julien and G. Spach (France)* 365

*Author Index* 375